

### **Amendments to the Claims**

Please amend the claims as shown below.

1. (Currently Amended) A method for managing intra-day interest calculations for a bank account in an intra-day interest account management system, comprising:

(a) in response to fluctuations in an account balance of the bank account, setting, by the intra-day interest account management system, balance determination times for the account, the balance determination times corresponding to a plurality of points in time within the span of a single day at which respective net account balances are to be used in an interest calculation for the account, wherein the balance determination times define intervals measured in at least one of seconds, minutes, or hours;

(b) determining the balances for the account for the balance determination times, the determining including only transactions occurring prior to a specific balance determination time within the span of a single day;

(c) determining applicable conditions for the interest calculation, the conditions relating to an interest rate to be applied based on an interest day type code assigned to the single day, the interest day type code associated with respective different interest rates at which respective net account balances are to be used in the interest calculation for the account, wherein a different interest rate is applied in the interest calculation for at least one of the balance determination times within the single day;

(d) providing the account balances and applicable conditions to interest calculation logic in the intra-day interest account management system; and

(e) recording a result of operations by the interest calculation logic in the intra-day interest account management system; and

(f) presenting on a display device a graphical user interface having user-modifiable data fields providing a mapping of different interest rates to various interest day type codes, wherein the mapping of the different interest rates to each of the various interest day type codes is dependent upon conditions entered in the data fields related to the each of the different interest rates, and the conditions are modified according to user input.

2 - 4. (Canceled).

5. (Original) The method of claim 1, further comprising assigning a value time to a transaction to the account, the value time corresponding to a time when the transaction is included in a balance determination.

6. (Original) The method of claim 5, wherein the value time is specified with an accuracy to the second.

7. (Canceled)

8. (Original) The method of claim 1, wherein based on the conditions, an interest rate used in performing the interest calculation may change from a first time interval to a second time interval.

9. (Currently Amended) A method for managing intra-day interest calculations for a bank account, comprising:

(a) receiving a designation of a bank account to receive intra-day interest calculation;

(b) receiving transaction information for the account, the transaction information including a value time specifying when a transaction is to be taken into account for interest calculation;

(c) receiving a specification of a plurality of points in time for determining corresponding account balances for use in calculating an interest on the bank account, wherein the points of time correspond to a plurality of times within a single day and are determined by an intra-day interest account management system in response to intra-day fluctuations in an account balance of the bank account, wherein the points of time define intervals measured in at least one of seconds, minutes, or hours;

(d) for each of the points in time, determining a corresponding account balance, the account balance at a given point in time at least partly depending on the value time;

(e) for each of the points in time, determining an applicable interest rate based on an interest day type code associated with respective different interest rates assigned to the single day at which respective net account balances are to be used in the interest calculation for the

account, wherein a different interest rate is applied in the interest calculation for at least one of the balance determination times within the single day;

(f) providing the account balances and the applicable interest rates to interest calculation logic; and

(g) generating a record of interest amounts calculated by the interest calculation logic;  
and

(h) presenting on a display device a graphical user interface having user-modifiable data fields providing a mapping of different interest rates to various interest day type codes, wherein the mapping of the different interest rates to each of the various interest day type codes is dependent upon conditions entered in the data fields related to the each of the different interest rates, and the conditions are modified according to user input.

10. (Canceled).

11. (Original) The method of claim 9, wherein (e) comprises referring to an interest calendar that classifies days according to differing interest day types, each type having an interest rate associated therewith.

12. (Currently Amended) A system comprising:

a memory including computer-executable instructions;

a processor coupled to the memory to execute the instructions, the instructions comprising:

in response to fluctuations in an account balance of a bank account, setting, by an intra-day interest account management system, points of time corresponding to a plurality of times within a single day, wherein the points of time define intervals measured in at least one of seconds, minutes, or hours;

the intra-day interest account management software configured to receive information relating to an intra-day interest calculation, the intra-day interest calculation relating to a calculation of interest on an account for the points of time corresponding to a plurality of times within a single day set by the intra-day interest account management system, the information including:

transaction information including a value time relating to when a transaction to the account is included in the account balance for interest calculation; and

conditions applicable to the interest calculation, the conditions relating to interest rates to be applied based on an interest day type code associated with respective different interest rates assigned to the single day at which respective net account balances are to be used in the interest calculation for the account, wherein a different interest rate is applied in the interest calculation for at least one of the balance determination times within the single day; and

a display device presenting a graphical user interface having user-modifiable data fields providing a mapping of different interest rates to various interest day type codes, wherein the mapping of the different interest rates to each of the various interest day type codes is dependent upon conditions entered in the data fields related to the each of the different interest rates, and the conditions are modified according to user input.

13. (Original) The system of claim 12, wherein the intra-day interest account management software is configured to implement a user interface providing for entry of the information.

14. (Original) The system of claim 12, wherein the intra-day interest account management software comprises an interest calendar, the interest calendar classifying days according to differing interest day types, each type having an interest rate associated therewith.

15. (Currently Amended) A system comprising:

a memory including computer-executable instructions;

a processor coupled to the memory to execute the instructions, the instructions when executed implementing a process for managing intra-day interest calculation for a bank account, the instructions comprising:

(a) in response to fluctuations in an account balance of the bank account, setting, by an intra-day interest account management system, balance determination times for the account, the balance determination times corresponding to a plurality of points in time within the span of a single day at which respective net account balances are to be used in an interest calculation

for the account, wherein the points in time define intervals measured in at least one of seconds, minutes, or hours;

(b) determining the balances for the account for the balance determination times;

(c) determining applicable conditions for the interest calculation, the conditions relating to an interest rate to be applied based on an interest day type code associated with respective different interest rates assigned to the single day at which respective net account balances are to be used in the interest calculation for the account, wherein a different interest rate is applied in the interest calculation for at least one of the balance determination times within the single day;

(d) providing the account balances and applicable conditions to interest calculation logic; and

(e) recording a result of operations by the interest calculation logic; and

(f) a display device presenting a graphical user interface having user-modifiable data fields providing a mapping of different interest rates to various interest day type codes, wherein the mapping of the different interest rates to each of the various interest day type codes is dependent upon conditions entered in the data fields related to the each of the different interest rates, and the conditions are modified according to user input.

16. (Canceled).

17. (Original) The system of claim 15, the process further comprising assigning a value time to a transaction to the account, the value time corresponding to a time when the transaction is included in a balance determination, wherein the value time is specified with an accuracy to the second.

18. (Currently Amended) A machine-readable medium storing computer-executable instructions for performing a method for managing intra-day interest calculation for a bank account, the method comprising:

(a) in response to fluctuations in an account balance of the bank account, setting, by an intra-day interest account management system, setting balance determination times for the account, the balance determination times corresponding to a plurality of points in time within

the span of a single day at which respective net account balances are to be used in an interest calculation for the account;

(b) determining the balances for the account for the balance determination times;

(c) determining applicable conditions for the interest calculation, the conditions relating to an interest rate to be applied based on an interest day type code associated with respective different interest rates assigned to the single day at which respective net account balances are to be used in the interest calculation for the account, wherein a different interest rate is applied in the interest calculation for at least one of the balance determination times within the single day, wherein the balance determination times define intervals measured in at least one of seconds, minutes, or hours;

(d) providing the account balances and applicable conditions to interest calculation logic; and

(e) recording a result of operations by the interest calculation logic; and

(f) presenting on a display device a graphical user interface having user-modifiable data fields providing a mapping of different interest rates to various interest day type codes, wherein the mapping of the different interest rates to each of the various interest day type codes is dependent upon conditions entered in the data fields related to the each of the different interest rates, and the conditions are modified according to user input.

19. (Canceled).

20. (Currently Amended) A machine-readable medium storing computer-executable instructions for performing a method for managing intra-day interest calculation for a bank account, the method comprising:

(a) receiving a designation of a bank account to receive intra-day interest calculation;

(b) receiving transaction information for the account, the transaction information including a value time specifying when a transaction is to be taken into account for interest calculation;

(c) receiving a specification of a plurality of points in time for determining corresponding account balances for use in calculating an interest on the bank account, wherein the points of

time correspond to a plurality of times within a single day and are determined by an intra-day interest account management system in response to fluctuations in an account balance of the bank account, wherein the points of time define intervals measured in at least one of seconds, minutes, or hours;

(d) for each of the points in time, determining a corresponding account balance, the account balance at a given point in time at least partly depending on the value time;

(e) for each of the points in time, determining an applicable interest rate based on an interest day type code associated with respective different interest rates assigned to the single day at which respective net account balances are to be used in the interest calculation for the account, wherein a different interest rate is applied in the interest calculation for at least one of the balance determination times within the single day;

(f) providing the account balances and the applicable interest rates to interest calculation logic; and

(g) generating a record of interest amounts calculated by the interest calculation logic; and

(h) presenting on a display device a graphical user interface having user-modifiable data fields providing a mapping of different interest rates to various interest day type codes, wherein the mapping of the different interest rates to each of the various interest day type codes is dependent upon conditions entered in the data fields related to the each of the different interest rates, and the conditions are modified according to user input.

21. - 28. (Canceled).